

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Crocker et al.
SERIAL NO.: (continuation of 09/122,418)
FILING DATE: August 28, 2001
TITLE: APPARATUS AND METHOD FOR MANIPULATING PACKET
ORDERING OVER PARALLEL LINKS OF A CROSSBAR BASED
SWITCH FABRIC
EXAMINER: Ngo, R (parent case)
ART UNIT: 2664

CERTIFICATE OF MAILING


"Express Mail" mailing label no.: EL839722893US

Date of Deposit: August 28, 2001

I hereby certify that this paper is being deposited with the United States Postal Service "Express Mail

Post Office to Addressee" service under 37 CFR §1.10 on the date indicated above and addressed to:

Box PATENT APPLICATION, Commissioner for Patents, Washington, DC 20231, on the date printed below:

Name: 
Diane Morse

PRELIMINARY AMENDMENT

COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

Dear Sir:

This paper is in response to the Final Office Action, dated July 16, 2001, from the parent case 09/122,418. Please amend the above-identified application as shown.

IN THE SPECIFICATION

On page 1 between the TITLE OF THE INVENTION and the FIELD OF THE INVENTION, please insert the following paragraph:

-- RELATED APPLICATION DATA

The present application is a continuation of U.S. Patent Application No. 09/122,418, filed on July 24, 1998, now U.S. Patent No. _____. --

IN THE CLAIMS

Please cancel claims 1-6 and 10-19 without prejudice.

Please amend claim 7 as follows:

7. (Amended Once) A data exchange system comprising:

at least one transmitting agent for transmitting data;

at least one receiving agent for receiving data wherein said at least one receiving agent includes a sequence counter for sequentially numbering the data as received by said at least one receiving agent;

a plurality of data links connected between said at least one transmitting agent and said at least one receiving agent wherein each of said plurality of data links includes a crossbar;

means for transmitting data from the same Order Critical Flow on a first data link of said plurality of data links; and

means for processing data by said at least one receiving agent in the sequential order in which the data was received.

Claims 20-23 have been added as follows:

20. (New) A transmitting agent for transmitting data over a data exchange system having at least one transmitting agent, at least one receiving agent, and a plurality of data links connected between the at least one transmitting agent and the at least one receiving agent,

wherein the at least one receiving agent includes a sequence counter for sequentially numbering the data as received and means for processing data in the sequential order in which the data was received and wherein each of the plurality of data links includes a crossbar, the transmitting agent comprising means for transmitting data from the same Order Critical Flow on a first data link of the plurality of data links.

21. (New) The transmitting agent as defined in claim 20, further comprising a transmit queue having a plurality of memories wherein the data to be transmitted is stored.

22. (New) A receiving agent for receiving data over a data exchange system having at least one transmitting agent, at least one receiving agent, and a plurality of data links connected between the at least one transmitting agent and the at least one receiving agent, wherein the at least one transmitting agent includes means for transmitting data from the same Order Critical Flow on a first data link of the plurality of data links and wherein each of the plurality of data links includes a crossbar, the receiving agent comprising:

a sequence counter for sequentially numbering the data as received; and

means for processing data in the sequential order in which the data was received.

23. (New) The receiving agent as defined in claim 22, further comprising a receive queue having a plurality of memories wherein the data that has been received is stored.

REMARKS

In part, the amendments bring the present case back to the state that the parent case was in when it was finally rejected and leaves claims 7-9 and 20-23 pending.

Claims 1-6 and 10-19 have been canceled, without prejudice.

Claim 7 has been amended to clarify antecedent basis.

New claims 20-23 also particularly point out and distinctly claim subject matter regarded as the invention.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current Amendment. The attached page is captioned "Version with Markings to Show Changes Made."

The 35 U.S.C. § 102 Rejection

According to M.P.E.P. § 2131, "[a] claim is anticipated [under 35 U.S.C. §102(a), (b), and (e)] only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." It goes on to state that "[t]he elements must be arranged as required by the claim..."

In the parent case, claims 7-9 and 20-23 stood rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by *Aramaki*.. This rejection is respectfully traversed.

Specifically, the Office Action cited various elements of *Aramaki* as disclosing or suggesting all of the limitations in claims.

The Office Action stated that "[t]he at least one receiving agent (13) further includes a sequence counter for sequentially numbering the data received from the plurality of links (Fig. 4)." However, *Aramaki* discloses that the distributor 11 and not the sequencer 13 assigns a timestamp to the received data. (See 21 of FIG. 2) The sequencer 13 only reads the timestamp. This is not as claimed.

The Office Action further stated that "...the at least [one] receiving agent (13) further includes means for transmitting data from the same order critical flow (sequential order) on the same link (14)." However, this confuses the transmitter and the receiver and adds links that are not claimed. The transmitter and not the receiver "transmits" as claimed. Further, in different portions of the analysis, the Office Action cites the sequencer 13 as both the receiver and the transmitter claimed. This is inconsistent. Further still, the only links claimed are "connected between" the transmitter and the receiver. Link 14 of *Aramaki* is not connected to the distributor 11 at all so it is not between the distributor 11 and the sequencer 13.

Given these differences, *Aramaki* cannot be said to anticipate the presently claimed invention. In view of the above, it is respectfully asserted that the claims are now in condition for allowance.

Request for Allowance

In view of the foregoing, an early allowance of this application is earnestly solicited.

If any matters remain which could be resolved in a telephone interview between the Examiner and the undersigned, the Examiner is invited to call the undersigned to expedite resolution of any such matters.

Respectfully submitted,
THELEN, REID, & PRIEST LLP



David B. Ritchie
Reg. No. 31,562

Dated: August 27, 2001

Thelen, Reid, & Priest LLP
P.O. Box 640640
San Jose, CA 95164-0640
(408) 292-5800

VERSION WITH MARKINGS TO SHOW CHANGES MADE**IN THE SPECIFICATION**

On page 1 between the TITLE OF THE INVENTION and the FIELD OF THE INVENTION, please insert the following paragraph:

-- RELATED APPLICATION DATA

The present application is a continuation of U.S. Patent Application No. 09/122,418, filed on July 24, 1998, now U.S. Patent No. _____. --

IN THE CLAIMS

Claims 1-6 and 10-19 have been cancelled.

Please amend claim 7 as follows:

7. (Amended Once) A data exchange system comprising:

at least one transmitting agent for transmitting data;

at least one receiving agent for receiving data wherein said at least one receiving agent includes a sequence counter for sequentially numbering the data as received by said at least one receiving agent;

a plurality of data links connected between said at least one transmitting agent and said at least one receiving agent wherein each of said plurality of data links includes a crossbar;

means for transmitting data from the same Order Critical Flow on [the same] a first data link of said plurality of data links; and

means for processing data by said at least one receiving agent in the sequential order in which the data was received.

Claims 20-23 have been added as follows:

20. (New) A transmitting agent for transmitting data over a data exchange system having at least one transmitting agent, at least one receiving agent, and a plurality of data links

connected between the at least one transmitting agent and the at least one receiving agent, wherein the at least one receiving agent includes a sequence counter for sequentially numbering the data as received and means for processing data in the sequential order in which the data was received and wherein each of the plurality of data links includes a crossbar, the transmitting agent comprising means for transmitting data from the same Order Critical Flow on a first data link of the plurality of data links.

21. (New) The transmitting agent as defined in claim 20, further comprising a transmit queue having a plurality of memories wherein the data to be transmitted is stored.

22. (New) A receiving agent for receiving data over a data exchange system having at least one transmitting agent, at least one receiving agent, and a plurality of data links connected between the at least one transmitting agent and the at least one receiving agent, wherein the at least one transmitting agent includes means for transmitting data from the same Order Critical Flow on a first data link of the plurality of data links and wherein each of the plurality of data links includes a crossbar, the receiving agent comprising:

a sequence counter for sequentially numbering the data as received; and
means for processing data in the sequential order in which the data was received.

23. (New) The receiving agent as defined in claim 22, further comprising a receive queue having a plurality of memories wherein the data that has been received is stored.